

A Tentative Definition and Taxonomy of Conflict: an economist's point of view

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Abstract: Violent conflicts as wars, revolutions, rebellions have always been the traditional domain of students of politics. In recent years among economists there is a growing interest for conflict in its different form. The goal of this short essay is twofold: first, I try a tentative novel definition of conflict linked with categories famous among economists as rent-seeking, contest and unproductive activities. Secondly, I also try a taxonomy of different forms of conflict.

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A Tentative Definition and Taxonomy of Conflict: an economist's point of view

Violent conflicts as wars, revolutions, rebellions have always been the traditional domain of students of politics. In recent years among economists there is a growing interest for conflict in its different form. The goal of this short essay is twofold: first, I try a tentative novel definition of conflict linked with categories famous among economists as rent-seeking, contest and unproductive activities. Secondly, I also try a taxonomy of different forms of conflict.

Violent conflicts as wars, revolutions, rebellions have always been the traditional domain of students of politics. In recent years among economists there is a growing interest for conflict in its different form. Exchange is the traditional domain of economics. In its simplest form, two parties agree to exchange something against something else, usually money against goods and services. Exchange is supposed to be carried out on voluntary basis of agents which interact rationally. The final outcome is a mutual advantage for parties. Unfortunately, voluntary exchange does not exhaust the complexity of economic activity.

You can buy something, but you can also steal it. You can appropriate, confiscate, grab, and plunder instead of producing, contracting or exchanging. Needless to say, appropriative and conflict activities constitute an ordinary aspect of economic life. Thus, the interdependence of production, exchange and conflict is essential for economics. Many brilliant articles by Charles Anderton and his associates shed light on this point going far beyond the traditional neoclassical economic modelling. What economic theory can say about conflicts? First consider that in economics activities are related to the resources used to carry them out. Individuals,

groups, organisations allocate resources to different activities, according to their preferences. Resources are other than anything which can contribute to economic activity. Hence, economics is all about trade-offs. What is allocated in one activity cannot be allocated to another. This applies whether the resource are those available to an individual, a firm, a government or the world as a whole. It could not be possible to analyse the political economy of many states without considering the level of resources they devote to arming.

Since Paul Samuelson in 1948, it has been popular to label the two goods in question "Guns" and "Butter." Thus, at any point in time a state has a given stock of resources. These can be used to produce either military goods, which are designated by 'guns', or civilian goods designated 'butter'. This dichotomy captures the very real trade-off societies typically face in the allocation of resources between national defence and private consumption goods. The negative impact of military spending on welfare sheds light on an peculiar aspect of conflict. In fact, resources devoted to conflict are unproductive.

The distinction between 'productive' and 'unproductive' activities is one of the widest themes in economics. Including conflict in the range of unproductive activities constitutes the first step to find a satisfactory definition for it. In more recent years, Jagdish Bhagwati, in his illuminating article *Directly Unproductive, Profit-Seeking (DUP) Activities*, proposes a general taxonomy for a broader range of economic activities which represent ways of making profit despite being directly unproductive. According to his view, such activities yield pecuniary returns but do not produce goods and services that enter a utility function, either directly or indirectly through increased production or availability to the economy of goods that enter an utility function. He labels them as *directly unproductive profit-seeking activities* (DUP). Classical examples are tariff-seeking lobbying, tariff evasion, premium(rent) seeking. Their output is clearly zero in terms of the flow of

goods and services entering a conventional utility function. Evasion of a tariff, for example, yields clearly pecuniary returns by means of exploitation of the price differential between legal transactions and illegal transactions. In the broader range of unproductive activities conflict is often linked to other two categories of unproductive activities: *contest* and *rent-seeking*. Conflicts, contests and rent-seeking can be considered directly unproductive activities in the spirit of Bhagwati's definition. They yield pecuniary returns but do not produce goods and services that enter a utility function directly or indirectly.

In his paper *The Analytics of Continuing Conflict* Jack Hirshleifer underlines how appropriation is a generalization of the more familiar concept of *rent-seeking*. The theory of rent-seeking deals with normative and positive analysis of the state action. In fact, the theory of rent-seeking assume the existence of states and governments from the start. As offshoots, products or by-products of the existence of governments, rents flourish and take a variety of forms. Moreover, the term rent-seeking is commonly designed to describe institutional settings and rewards structure where individual efforts produce social waste instead of social surplus. Individuals, groups and organisations compete in order to gain an economic rent. Such rents. In the meantime rent-seeking can also be seen as part of a broader category of unproductive activities. Taking into account the main feature of the existence of a prize, rent-seeking would be a subset of a *contest*. Contest is a broader general category where agents devote efforts in order to increase their probability of winning a prize. Contests embrace many real world situations, among others tournaments, beauty contest, and competition over a R&D innovation. Moreover, contests offer rewards which depend upon an individual's performance relative to others.

There are some elements that make conflicts, contests, and rent-seeking different. Neither contest nor rent-seeking activities include the use of force or violence in order to win the 'prize' or capture the 'rent'. Then, a characteristic element that

distinguishes conflicts from rent-seeking and contests is the use of force and violence. Note also that a conflict does not necessarily imply actual violence; a credible threat of use of violence suffices. That is, the exploitation of potential force or violence also plays a role.

Another characteristic element of contests is their voluntary nature. As in exchange interactions in most cases agents participate in contests on a voluntary basis. By contrast, since conflict is linked directly with the use of force and violence, it commonly involves the use of coercion affecting the behaviour of opponents.

Hence, improving your performance in contests appears to be an optimal strategy. By contrast, in conflicts, other strategies are likely to occur such as hindering or making ineffective opponents' strategies. Force and violence play a role also in this case. When one or more competitors adopt hindrance strategies, the result is clearly a conflict. These latter considerations pave the way to understand the position of the sub-set of conflict activities within the larger set of DUP activities.

Then, trying to reconstruct a classification, it is possible to say that *rent-seeking and contests constitute different subsets within the much broader category of conflict interactions*. However, these can be considered as ideal categories. In fact, there are also instances of hybrid types which can record intersections of the elements considered. Consider for example, the occurrence of sabotage in rent-seeking. In such a case two types of efforts are considered: efforts that improve the contestants' performance (standard rent-seeking) and efforts that reduce particular rivals' performance (sabotage). The existence of sabotage may increase or decrease standard rent-seeking effort as well as the dissipation of resources. Such a case is clearly more akin to conflict even if there is no exploitation of actual or potential force.

Finally, I try a definition for conflict as: *The unproductive use of resources devoted to the appropriation of other resources or goods through the exploitation of actual or potential force or violence*

towards other competitors in order to hinder their performance and influence their behaviour. Albeit non-fully satisfactory, such a definition contains all the characteristic elements of conflict activities.

Once defined conflict as a subset of a directly unproductive activities also containing contests and rent-seeking, it would be also worth-noting try a taxonomy of it for its different types. To do that, I follow and borrow again the approach expounded by Bhagwati in the same article quoted above. The world designed would be the classical world of economists. It would be distortion-free except for the distortions created by DUP activities either directly or indirectly. Thus, the taxonomy presented by Bhagwati assumes that all DUP activities may involve either a distorted or a distortion-free situation. Note also that DUP activities considered are only those related to governmental policies. Thus, he distinguishes four critical broad classes: (1) initial and final situations are both distorted (**DD**); (2): initial situation is distorted but the final situation (thanks to the DUP activity) is distortion free (**DF**); (3) initial situation is distortion free but the final situation is distorted (**FD**); (4) the initial situation is distortion free and so is the final situation (despite the DUP activity) (**FF**). A second level of classification is related to the legal or illegal nature of activities so that he is able to present eight different classes. Once explained the general concept of DUP activities as well as their classification, Bhagwati's analysis address directly the issue of welfare consequences of DUP activities. Consider for example activities of tariff-seeking: initial situation is distortion-free but such activity creates, on a legal basis, a distorted final situation. By contrast, theft falls in the domain of illegal activities but it emerges in a distortion-free initial situation which does not become distorted. These cases give a total outcome which is necessarily welfare-immiserizing. Meanwhile, Bhagwati also indicates some kind of activities which could yield a paradoxical outcome. In fact, activities such as tariff-destroying

lobbying may emerge in a distorted situation (protected trade) and produce a distortion-free situation (free trade). They can be legal or illegal (with bribes to politicians).

In the remainder of this paper I also try to construct a tentative taxonomy of conflicts by means of the categories indicated in Bhagwati's work. I deliberately disregard the distinction between legal and illegal activities. I only take into account whether the both initial and final situation is distorted. Then, I only consider activities within the four broader classes. Hence, I classify conflicts under the above four heads.

TABLE 1.1 EXAMPLES OF CONFLICTS AS DUP ACTIVITIES. ADAPTED FROM BHAGWATI (1982)		
TYPES OF CONFLICTS AS DIRECTLY UNPRODUCTIVE ACTIVITIES		
	1. INITIALLY DISTORTED AND FINALLY DISTORTED SITUATIONS (DD)	2. INITIALLY DISTORTED BUT FINALLY DISTORTION-FREE SITUATIONS(DF)
EXAMPLES	1.1 Civil wars 1.2 Mercantilistic trade warfare 1.3 International Negative Sanctions; 1.4 Cold War and Arms Race	2.1 War after sanctions 2.2 International trade Disputes 2.4 De-escalation of Arms Race.
	3. INITIALLY DISTORTION-FREE BUT FINALLY DISTORTED SITUATIONS(FD)	4. INITIALLY DISTORTION-FREE AND FINALLY DISTORTION-FREE SITUATIONS(FF)
EXAMPLES	3.1 Land Squattering 3.2 Tragedy of Commons 3.3 Colonialistic war	4.1 Piracy 4.2 Plunder

The first category (**DD**) appears to embrace some particular phenomena. An initially distorted situation is often due to the existence of an institution (as a government for example) which allows for monopoly rents over some scarce resources.

Consider for instance civil wars and insurrections occurring in less developed countries. In many cases an organized group is a challenge to the ruling elite that has the control over natural resources at its exclusive disposal. Indeed, an opposing group has an incentive to fight against the ruling group because of the expected redistribution of available output occurring after the war. Recent studies confirm this idea. A growing literature on economic causes of civil violent conflicts confirm this idea. Some scholars point out that opportunity variables as extortion of natural resources, donations from diasporas, subventions from hostile governments are more explanatory than ethnic or religious hatred, political repression, political exclusion, and economic inequality. Moreover, it is worth noting point out some variables among others: a higher dependence from primary commodity exports does increase the risk of an internal conflict. In such cases, final situations are also distorted: exploitation of economic rents does not disappear but it can only shift to another individual, group or organisation.

Some conflicts do not count the existence of institutions from the start. In spirit of classical economic definitions applied here it would mean that no distortions exist. Such situation can become distorted because of a conflict. An example for category **FD** appears to be the Tragedy of Commons. It refers to a particular category of goods with different features. The goods in question could be fish populations in the sea. First, these goods are non-excludable as it is the case for pure public goods. Second, these goods are considered rival, as private goods. This means that if one agent gets one unit of a particular good, the other agents have one unit less to consume. The combination of the two features of non-excludability and rivalry makes the good vulnerable to over-exploitation. With poorly defined

property rights or lack of political stability, conflicts over the exploitation of the 'commons' emerge since agents have incentives to capture the rents from commons and natural resources. The situation is initially distortion-free only because commons or natural resources exist and are subject to human exploitation. It is characterised by an initial distortion free situation and a final distorted situation. Land squatting and west-ward settlement in nineteenth century America could be also considered an example. At that time large tracts of land were occupied and then bought by rifle-armed squatter farmers. Afterwards they would have also been granted with immunity by the Congress that finally declared squatting legal in 1841.

A possible example of **DF** seems to be the case of international trade dispute under the umbrella of international regime or institution, as in the GATT/WTO system. That is, this category is more akin with the resolution of conflict rather than the conflict in itself. Trade disputes constitute a fruitful example. In fact, commercial rivalry and conflicting economic interests have always been major sources of hostility and violent conflicts between nations. The two Anglo-Dutch wars in seventeenth century are an example as well as the Anglo-Spanish war of 1762. In most cases wars are waged in order to protect or to constitute commercial privileges. The experience of the British *navigation act* was intended to assure that foreign trade would be carried on in such a way as to yield the maximum advantage to Great Britain. Thus, the existence and the protection of a monopoly induced higher spending for military. Adam Smith complained about such military expense only required to the maintaining of this monopoly.

In economists' eyes building up or protecting privileges as monopolies, licenses or particular agreements means also driving or keeping the welfare-immiserizing distortions. Since such regimes and institutions are committed to foster free trade, disputes commonly are launched against distorted situations which have unfavourable implications for some countries or the whole trading system. Note that under a litigation the use of the

force and violence does not disappear. In general, litigations and lawsuits within a country are characterised by the existence of a third party that is expected to guarantee enforcement of contracts. That is, the use of the force and violence does not disappear, but it is at a third party's exclusive disposal. In international trade disputes among WTO members, the Dispute Settlement Procedure is not capable to effectively guarantee contracts' enforcement. Countries are expected to comply voluntarily with obligations emerging in the dispute settlement system. In an anarchic world the power of countries affects negotiating positions of different parties. Needless to say, power of countries is also based on the level of exploitation of potential force and violence in order to affect other parties' behaviour. That is, in a rule-based system, at least in formal sense, any existing imbalance of power between members is expected to disappear. In such cases, however, conflict does not disappear. Nonetheless, it seems to move nearer to its resolution. At the same time the dispute settlement system helps countries to coordinate on more efficient equilibria.

Conflicts in category FF emerge under an initially distortion-free situation and finish with a final distortion-free situation. An example could be constituted by piracy. In fact, in such a case, efforts of a group (pirates) are offset by an action of policing the seas by another group (private or public). The result is that mutually unproductive efforts lead to a huge dissipation of resources. At the same time, the initially situation is not overturned and remains distortions free. This is also the case of plunder and the protection against it. However the existence of conflicts only induce a high cost to the whole system because of the sunk costs and the wasted resources.

The main results I would claim for this short essay are both a more accurate definition and a classification of conflicts with respect to the past. Albeit in narrative form, both results have been by means of economic concepts and categories. They may help the study of the impact of conflict on the economic

behaviour and welfare of organizations, governments and society. Moreover, they also may suggest the use of different economic measures and policy to cope with and control conflicts whether economic or not as well as an optimal design of conflict resolution, management or reduction.

[2722 words]

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